

REMARKS

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

Specifically, claim 3 has been amended to clarify that the needle containing a non-noble base metal of the automatic sampler has an inner surface that defines a flow path for the liquid samples collected from the sample vessels, and that only the outer surface of the needle is coated with the coating material that includes polyetheretherketone (PEEK) and that the inner surface of the needle is defined by the non-noble base metal and is not coated. The amendments to claim 3 clearly add no new matter to the application inasmuch as a needle having such a structure is specifically described in the specification from page 9, line 20 to page 10, line 6.

Also by this amendment, claim 5 has been canceled and new claim 18 has been added to the application. New claim 18 claims an instrument comprising an automatic sampler that includes a needle containing a non-noble base metal and having an outer surface and an inner surface, the inner surface defining a flow path for the liquid samples collected from the sample vessels, wherein only the outer surface of the needle is coated with a coating material that includes a synthetic resin coating including polyetheretherketone, and wherein the inner surface of the needle is coated via a chemical vapor deposition method with either a metallic thin film or a thin film of high-purity quartz. A needle having this structure is specifically described in the specification at page 10, lines 7-21, and thus new claim 18 adds no new matter to the application. Claims 1, 3, 16 and 18 are thus pending in the application.

In the prior Office Action, the Examiner rejected claims 3 and 16 under 35 U.S.C. §103(a) as being unpatentable over El-Hage et al., U.S. Pat. 5,843,378, in view of Palasis et al., U.S. Pat. 6,638,259. In view of the amendments to claim 3, reconsideration of the prior rejection is respectfully requested.

With reference to Figs. 2 and 5, El-Hage et al. discloses a probe for aspirating and dispensing liquids that includes an electrically conductive fluid conduit 26 (col. 4, line 8) that is surrounded by an inner layer 92 made of a meltable material such as fluorinated ethylene propylene and an outer layer 90 made of a heat-shrinkable material (see col. 4, line 65 to col. 5, line 5). The Examiner concedes that El-Hage et al. does not teach a needle having a resin coating of PEEK.

Palasis et al. teaches that metallic components are frequently used to carry pharmaceutically active materials, but that contact between the pharmaceutically active material and the metallic component should be avoided because of incompatibility (see col. 1, lines 13-34). To avoid the incompatibility issues, Palasis et al. teaches that the metallic component should be modified by providing it with a surface treatment that prevents contact between the pharmaceutically active material and the metallic component, or that the metallic component should be replaced entirely with a more inert metallic component or a polymeric component such as PEEK (see col. 2, lines 30-52).

Applicants respectfully submit that it is not possible to combine the teachings of El-Hage et al. and Palasis et al. in such a manner as to arrive at an instrument having the elements presently claimed in claim 3. El-Hage et al. does not teach the use of PEEK for any reason, and Palasis et al. teaches the use of PEEK for the purpose of preventing any contact between the pharmaceutically active material and

the metallic components of the device. Thus, were one to combine the teachings of El-Hage et al. and Palasis et al., the result would be an instrument in which there were no metallic surfaces that come into contact with liquids. In contrast to the combined teachings of El-Hage et al. and Palasis et al., in applicants' instrument as claimed in claim 3, the inner surface of the needle is defined by a non-noble base metal that is not coated and serves as a flow path for the liquid samples collected from the sample vessels. Thus, in applicants' instrument as claimed in claim 3, the liquid contacts the metallic surface.

Claims 3 and 16 were also rejected under 35 U.S.C. §103(a) as being unpatentable over King et al., U.S. Pat. 6,132,582, in view of Palasis et al. King et al. discloses a sample handling system that utilizes pipettes 56 to collect samples from a work surface and dispense samples onto a loading well (see col. 5, lines 55-61). King et al. teaches that the material used to fabricate the pipettes depends on the requirements of the application, and then mentions a variety of materials including stainless steel and plastic coated materials, for example (see col. 6, lines 7-23). King et al. does not teach the use of PEEK.

As noted above, Palasis et al. does discuss the use of PEEK, but does so in the context of completely avoiding and preventing any contact between the liquid conveyed and metallic surfaces. Thus, were one to manufacture a sample handling system according to King et al. in view of the teachings of Palasis et al., the sample handling system would utilize pipettes that consist entirely of PEEK or consist of metallic components that have the liquid-contacting surfaces coated with PEEK. In contrast to such teachings, claim 3 of the present application requires that PEEK be coated only to the outer surface of the non-noble base metal needle, and that the

inner surface of the needle should not be coated.

In the prior Office Action, the Examiner stated that claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over el-Hage et al. in view of Batich et al., U.S. Pub. Pat. App. 2005/0017099, or in the alternative, Wagner et al., U.S. Pat. 5,938,604. Claim 5 was also rejected under 35 U.S.C. §103(a) as being unpatentable over King et al. in view of Batich et al. By this Amendment, claim 5 has been canceled thereby rendering the prior rejections thereof moot.

New claim 18 has been added to the application to round out applicant's claim coverage. New claim 18 adds no new matter, and discloses an instrument having a needle that does not have a structure that is disclosed, taught or suggested in the prior art of record.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge the same to our Deposit Account No. 18-0160, our Order No. NGB-12930.

Respectfully submitted,

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